Group-Based Physical Therapy for Low Back Pain in Active Duty Service Members: A Quality Improvement Initiative

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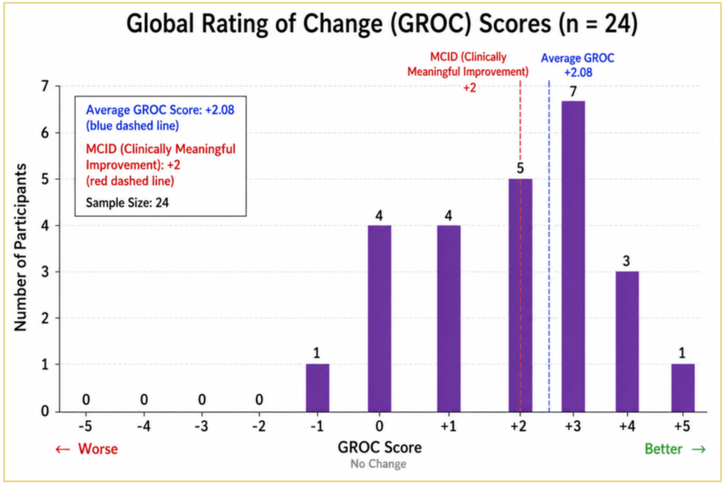
Background & Purpose

- Low back pain (LBP) is one of the most common musculoskeletal conditions affecting active duty service members and contributes to decreased operational readiness.
- Physical therapy is widely accepted as a first-line conservative treatment and represents a significant source of healthcare utilization in the treatment of LBP.[4]
- Current military research has demonstrated that group-based physical therapy improves access to care while producing outcomes comparable to traditional one-on-one treatment.[2]
- To improve patient access to care and clinic efficiency, an outpatient group-based rehabilitation class for service members with LBP was implemented.
- The purpose of this quality improvement initiative is to evaluate the effectiveness of a group-based physical therapy program for active duty service members with low back pain using patient-reported outcomes.

Methods

- A group-based rehabilitation class was developed for active duty service members with low back pain receiving outpatient physical therapy at a military treatment facility.
- Patients were individually evaluated by a physical therapist and enrolled in the class if deemed appropriate for group-based rehabilitation.
- Classes were offered 4 days per week, provided by one physical therapist and one physical therapy technician, with a maximum of 17 patients per session.
- Most participants attended 1-2 classes per week over approximately 4 weeks.
- Sessions emphasized progressive exercise, including hip and core stabilization, mobility, functional retraining, and patient education.
- Participants were invited to complete an anonymous 11-point Global Rating of Change (GROC) questionnaire after attending at least 4 classes.
- Clinically meaningful improvement was defined as a GROC score ≥ +2.[3]



Results at a Glance

GROC Responses	Mean GROC Score	Clinically Meaningful Improvement (GROC ≥ +2)	Moderate or Greater Improvement (GROC ≥ +3)
24	+2.08	66%	45%

Outcomes

- A total of 24 GROC responses were collected over a four-month period.
- The mean GROC score was 2.08, indicating clinical meaningful improvement.
- A total of 66% of participants reported clinically meaningful improvement (GROC ≥ +2), with 45% demonstrating moderate or greater improvement (GROC ≥ +3).[1]

Discussion

- This quality improvement initiative demonstrated that a structured group-based rehabilitation program can provide clinically meaningful patient-reported improvement for active duty service members with low back pain. These findings support the use of group-based physical therapy as a practical model for delivering conservative management of low back pain in a military treatment facility.
- Beyond patient outcomes, a group-based model offers an opportunity to improve access to physical therapy by treating multiple patients simultaneously. This approach may increase clinic efficiency and expand access to evidence-based rehabilitation without relying exclusively on individual treatment sessions, making it a practical strategy for managing the high volume of low back pain cases commonly seen in military physical therapy clinics.
- Several limitations should be considered when interpreting these findings. The sample size was small, outcome data was collected anonymously, and no baseline functional outcome measure was obtained. Future quality improvement efforts will incorporate pre-and post-intervention functional outcome measures, such as the Oswestry Disability Index, and evaluate larger patient cohorts to further assess program effectiveness.

References

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